XX. A List of the Coleoptera of the Maltese Islands. By MALCOLM CAMERON, M.B., R.N., and A. CARUANA GATTO, LL.D.

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In publishing this contribution we trust that it may be of some service to collectors and those interested in the

distribution of species.

We must acknowledge our indebtedness to the following gentlemen, who have been good enough to examine some of the species:—MM. Fauvel, Reitter, Pic, Régimbart, Desbrochers des Loges, Dr. David Sharp, and Mr. E. A. Newbery; also to Mr. G. C. Champion, who has kindly allowed us to see many species from the collection of Commander J. J. Walker, R.N., which had not been obtained by us, and which in the list are noted as Coll. J. J. W., or teste J. J. W. Names of species in brackets are those which have not come under our notice, although recorded by others.

The order and nomenclature adopted throughout is that of the "Cat. Col. Europæ" of Heyden, Reitter, and

Weise (1891 edition).

The figures refer to the months.

# GENERAL DESCRIPTION OF THE MALTESE ISLANDS.

The group of the Maltese Islands consists of the two islands of Malta and Gozo, and of the small islets of Comino, Cominotto, and Filfola.

Malta, which is the main island, is  $17\frac{1}{2}$  miles in length and  $8\frac{1}{3}$  miles in breadth, its area being 95 square miles; Gozo is 9 miles in length,  $4\frac{1}{2}$  in breadth, and has an area

of 20 square miles; Comino has an area of about 1 square mile, and Cominotto and Filfola are even smaller.

They are situated almost at the centre of the Mediterranean; the distance from Capo Passero in Sicily is about 60 miles, and from the nearest point in Africa about 200 miles. Close to the African shore lies the island of Lampedusa, and further west, midway between Sicily and Africa, the islands of Linosa and Pantelleria. Both with

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regard to the flora and fauna all these islands bear a great affinity to the Maltese group, but, as may be supposed, the productions of the latter are even more allied to those of Sicily. As a matter of fact, the Maltese Islands, in their general appearance, are very much like the southern part of Sicily and the country about Syracuse, the only difference being the greater flatness of the land in Malta, and the want of trees and water-courses.

The climate, as lately well described by Mr. T. B. Fletcher, R.N., F.E.S., may be divided roughly into a wet and a dry season, the former beginning in October and ending in March, the latter including the remaining months. Showers of rain occur also in April, May, and September, but in June, July, and August they are much rarer. The average rainfall is over 20 inches, and the

mean annual temperature is 65.6° Fahr.

The appearance of the islands in summer is extremely sterile and barren, mainly because, even where the soil is cultivated, the small fields are enclosed by numberless stone walls of loose stones, and the rocky wastes are almost devoid of all vegetation. The heat is then almost tropical, the temperature ranging from 75° to 90° in the shade.

In Malta there are no mountains, rivers, or marshes. The highest point in the islands is 758 feet above sea-level; the limestone cliffs on the west and south very often rise abruptly from the sea to a height of 300 or 400 feet. In Malta the land slopes gradually on the east to the water edge, forming numerous bays and harbours, and drops suddenly on the other side by a large "fault," which crosses the island from end to end at right angles to its long axis.

The place of rivers is taken by deep valleys, called "Wieds" in the Maltese language; and in these "wieds" during the rainy season water runs at the bottom, and pools of water may be found even afterwards, but in summer

they are perfectly dry.

Some of these valleys, particularly those which are less cultivated, are very good collecting-grounds, and in the proper season trips to such valleys as L'Imtahlep, Jneina, Inquisitor's Palace, Bishop's Garden, Ta Baldu, Encita, Babu, El Ghasel, in Malta, and Migiarro, Xlendi, Ducira, in Gozo, besides affording a good harvest in insects and plants, are always very interesting and pleasant excursions.

<sup>&</sup>lt;sup>1</sup> "Entomologist," vol. xxxvii, pp. 274-5.

One of the most noteworthy features of the islands is the want of trees. There must have been a time at some remote epoch in which trees and shrubs were not so scarce, and a certain amount of "bush," of which traces are still left, must have existed. At present the only indigenous trees and shrubs to be seen in some of the valleys just mentioned, not to speak of the rarer species, are the following:—Cratagus oxyacantha and azarolus, on which feeds Rhamphus pulicarius, Herbst; Populus alba, Salix alba and pedicillata, from which we obtained Smicronuv cyancus, Gyll., a few Quercus ilex, Pistacia lentiseus, Rosmarinus officinalis, Vitex agnus-eastus, Tamarix africana, (these two latter in Gozo), Euphorbia dendroides, Erica multiflora, Rhamnus oleoides, and Cineraria maritima, and Inula crithmoides on rocks near the sea. Rubus fruticosus, Smilax aspera, Lonicera implexa, Clematis eirrhosa, Hedera helix, and Asparagus acutifolius represent the climbing shrubs. Of cultivated trees, the Carob, Ccratonia siliqua, is generally spread, and with its dark evergreen foliage and low spreading branches marks in a characteristic way every Maltese landscape. Fig trees (Ficus carica) in several varieties and prickly pears (Opuntia vulgaris) are also widely grown by the walls in fields and country The cultivation of orange trees, which used tenements. to yield the finest and most luscious fruit in the world, is at present much neglected, on account of the scale-insect disease, and of the extensive free importation of oranges to Malta from Sicily and elsewhere. Vines are very abundant, and so are almond trees in some places, but though vineyards are to be met with in some places, woods, parks, and extensive groves are absolutely wanting.

The obvious result of this want of trees on Coleoptera, as may be seen in the list which follows, is the small number of Longicorns, other tree-borers and dendrophilous species. Considering that rivers, lakes, or any other permanent water-courses or open reservoirs are absolutely wanting, the presence of water-beetles may appear a puzzle. They are certainly not very numerous, but until the pools or streamlets at the bottom of the valleys dry up, the collector may successfully work for them among the *Charæ*, *Nitellæ*, and the fresh-water *Algæ* which then grow, or under stones at the water's edge. Chadwick's Reservoir or Wied el Klia, Fiddian, Marsa, Jneina, S. Martin, Boschetto,

water and for water-loving beetles.

Cicindela, Scarites, Dyschirius, Bembidia, Pogonus, Anisodaetylns, Acupalpus, Dichirotrichus, Bledius, Phaleria, Trachyscelis, Opatrum, Clitobius, and several Anthici are found in sandy and marshy places like Marsa, Salina, Melleha Bay, Marsa Scala, Birzebuggia, and Jneina. Umbellifers, Chrysanthemum coronarium and other composites, the Sulla (Hedysarum coronarium) yield a good harvest of Anthrenus, Attagenus, Colotes, Ebwus, Attalus, Dasytes, Psilothrix, Huplocnemus, Dasytiscus, Sitones, Ceuthorrhynchus, Labidostomus, and Mylabris; whilst on Cynaru horrida the Larini, Tillus transversalis, and the Cetonia may be collected. On Asphodel Agapanthia asphodeli is found; on Rumex, Apion wneum and meridianum; on Asparagus, Crioceris puracenthesis. Podagrica and Apion malvæ are found on Mallows, Emenadia on Crithmum, Chrysomela grossa on Nigulla, C. bicolor on Thymus capitatus, C. americana on Rosmarinus, C. quadrigemina, Suff., on Hypericum crismum, Epilachna on Echalium, Longitarsus strungulatus on Cineraria maritima, and Epicometis squalida and Leucocclis function on all sorts of flowers.

A great number of species like *Pimelia*, *Tentyria*, *Stenosis*, *Akis*, *Scaurus*, *Asida*, *Phylax*, *Pentodon*, *Hypera*, *Gonocephalum*, *Silpha* and others are found in the country by the road-sides, and on waste ground, crawling about

or under stones.

Every one knows where to look for Ateuchi, Arhodii, Onthophagi, Historida, Saprini, and many Staphylinida. The best time for collecting is, for autumnal species, from September, after the first rains, to the middle of November, and for spring species from February to June.

From February to April vegetation is at its best; Pheasant's-eye, Asphodel, Ranunculi, Helianthemi, Chrysanthemums, Poppies, Mallows, the introduced but abundant Oxalis cernua, and the Hedysarum voronarium in fields are in full bloom. A great nuisance in sweeping plants and beating the small bushes is the extraordinary abundance of young snails to which beetles are found to be sticking in the net or on the tray.

By July all herbage is dried up, and on account of the burning sun and the parched-up soil, the collector has to limit himself to beating trees in some shady valley, or in gardens and cultivated fields. Aulaeophora abdominalis is

then found on melon and cucumber plants. Longitarsus, Aphthona, Phyllotreta, Sphæroderma, Demetrias atricapillus,

and many Apions may thus be obtained.

In autumn, besides stone-turning and looking in the débris washed down by rains, a ready way to obtain some good species is by beating or shaking on the tray the bundles of *Inula* and other plants which are bound together to dry, and left by the country people on the ground in

fields or rocky places.

The distribution of species is very irregular; some of the most interesting and special forms are quite common, others have a very limited area of distribution, being local and very rare. Thus there is no difficulty in getting at the proper season—Dasytiscus melitensis, Tentyria lavigata, v. leachi, Asida melitana, Phylax melitensis, while Lamosthenes picicornis, Bruchus duvali, Thylacites beloni are harder to obtain, and Eurynebria complanata, Zuphium olens, Drypta distincta, Calosoma madera, Anthaxia umbellatarum, Saperda punctata, Callidium violaceum, Rhopalopus elavipes have been found only in single specimens.

Very little information has been published about the

Maltese Coleoptera.

George Waring, in his "Letters from Malta and Sicily" (1843), refers to a collection of beetles which in 1833 was being made in Malta by Dr. Leach, but it appears that unfortunately nothing was ever published about it.

In 1857 Prof. Gavino Gulia delivered a course of entomological lectures at St. Antonio, which were published in 1858; the determination of all species mentioned, however, is so doubtful, to say the least, that the list of species cannot be taken into any account.

One of us contributed to "The Mediterranean Naturalist," in 1893, an article on "The Common Beetles of the Maltese Islands," in which mention is made of about 135

species.

The only other published information which we know of is scattered through various entomological works, and consists mainly of the descriptions of several endemic

species.

Far from pretending that the following is a complete list of Maltese beetles, we are sure that further researches and studies will bring out more species, especially among the Micro-Coleoptera; we believe, however, that we may

state that the bulk of the Maltese Coleopterous fauna is very fairly represented in our list, the more so considering that this is the first attempt to give a list of the beetles.

# LIST OF COLEOPTERA OBSERVED IN THE MALTESE ISLANDS.<sup>1</sup>

## CICINDELIDÆ.

Cicindela (campestris, L., teste Gulia) littoralis, F.\*, Marsa, Mistra, Birzebuggia, Marsa Scala, Marsa Scirocco, Mellelia, Ramla, Gozo, 4–9; melancholica, F., Marsa, 7, sunrise till 8 A.M.

## CARABIDÆ.

Calosoma madera, F., Marsa, 7, Valletta, 7, two only. Carabus morbillosus, F.\*, general throughout the year. Eurynchria complanata, L., Melleha, 11, one only. Nebria andalusiaca, Ramb., general, 1-4, 11. Notiophilus geminatus, Dej.\*, general throughout the year. Scarites arenarius, Bon., St. George's Bay, 4-11, rare; buparius, Först., Melleha, Marfa, 3, 4, 5, 11, not common; planus, Bon.\*, Marsa, Fiddian, Melleha, Jniena, 4–11. Dyschirius nitidus, Schaum, Melleha, 11, common; mucroderus, Chaud., Marsa Scala, 6, rare; cylindricus, Dej., St. George's Bay, 8, one only; apicalis, Putz., Marsa, Birzebuggia, 8, common. Siagona curopæa, Dej., Melleha, 5, one only. Bembidion ambiguum, Dej.\*, general throughout the year; præustum, Dej.\*, Marsa, L'Imtahlep, Jniena, Marsa Scala, 5, 6, not common; normannum, Dej., Marsa Scala, Marsa Scirocco, St. George's Bay, 8, 9, common; obtusum, Sturm\*, general, 3–10; guttula, L., Jniena, Gnien el Gbir, 5, common; biguttatum, F.\*, Melleha, 4, 11, common. Ocys harpaloides, Serv., Gbir, Makluba, Attard, 5, 10, 11, common. Tuchys hamorrhoidalis, Dej.\*, El Klia, Gozo, 6, common; v. socius, Schaum, with type; unicolor, Ragusa, El Klia, 6; purvulus, Dej., Valletta, spring; v. quadrinavus, Reitt., with preceding; fulvicollis, Dej.\*, Marsa, Ghirghenti, 6-10, common; bistriatus, Duft, Marsa, 8, 9, 10, common; v. gregarius, Chaud., Marsa, 9, 10, common; scutellaris, Steph.\*, Marsa, Marsa Scala, St. George's Bay, Melleha, 4, 5, 9, 10; algiricus, Luc.\*, Jniena,

<sup>1</sup> The species marked with an asterisk, as well as those specially noted, were obtained in Malta by Mr. J. J. Walker in 1874-5-6, almost exclusively between the months of October and March.

11. Trechus subnotatus, Dej., Marsa, 5, common. Pogonus chalceus, Marsh., Marsa, Fort Manoel, Melleha, St. George's Bay, common all the year. Agonum atratum, Duft., Gbir, Jniena, 4-11, common. Olisthopus fuscatus, Dej.\*, common throughout the year. Bedelius circumseptus, Germ., general, 4-10. Calathus mollis, Marsh., common throughout the Læmosthenes picicornis, Dej., Valletta, Wied Encita, Marsa, Boschetto, Melleha, Zurico, Gozo, 11-3, not common; barbarus, Luc., ex. Coll. J. J. W. Amara anea, De G., Coll. Walker; eurynota, Panz., Gbir, 10, one example; dalmatina, Dej., Jniena, Ricasoli, Melleha, 10, 11, rare. Acinopus ambiguus, Dej.\*, Corradino, Tigné, Fort Manoel, Binjemma, Salina, Ricasoli, St. George's Bay, Attard, Gozo, not common, 4, 5, 9, 10, 11. Aristus clypeatus, Rossi\*, Corradino, El Klia, Naxaro, Marsa Scirocco, 4, 5, 10, not common. Ditomus cordatus, Dej.\*, San Martino, 11, two specimens; calydonius, Rossi\*, Jniena, L'Imtahlep, Encita, Wied Dalam, 1-4, 11, not common; tricuspidatus, F.\*, Ghirghenti, Gbir, 5, rare. Carterus fulvipes, Dej., Imtarfa, L'Imtahlep, 7, common. Scybalicus oblongiusculus, Dej., Jniena, 11, Gbir, 7, 9, rare. Ophonus meridionalis, Dei.\*, everywhere, 3-6, 10, 11; pubescens, Müll., Gbir, 6, 7, 9; griscus, Panz., Gbir, 6, 8. Harpalus tenebrosus, Dej., Jniena, Attard, Ricasoli, Salina, Notabile, 5, 8, 10, not common. Anisoductylus paciloides, Steph.\*, Marsa, Melleha, 3-6, not common. Dichirotrichus obsoletus, Dej.\*, St. George's Bay, Marsa Scirocco, Jniena, Melleha, 1, 4, 9, 10, 11, not rare. Bradycellus verbusci, Duft., Coll. Walker. Stenolophus tentonus, Schr., everywhere, 2-11; skrimshiranus, Steph., Gozo, 7, one example; marginatus, Dej.\*, Marsa, El Klia, St. George's Bay, 7, 8, rare. Acupalpus brunnipes, Sturm, Salina, 6, one example; (bistriga, Rttr., "Cat. Col. Europ."); dorsalis, F.\*, Jniena, 10; v. discus, Rttr., El Klia; immundus, Rttr., Jniena; lucasi, Gaubil\*, damp places everywhere, 8; flavipennis, Luc., Marsa, 10, one example. Amblystomus levantinus, Rttr., Melleha, Marsa Scirocco, 11, not common; cephalotes, Rttr., Jniena, 11, one example. Licinus brevicollis, Dej.\*, common throughout the year. Chlunius azurens, Duft.\*, Marsa, 6, 7, 8, rare; variegatus, Fourc., general, 2-10; festivus, F.\*, Ta Baldu, 11; velutinus, Duft.\*, El Klia, 7; circumseptus, Duft., El Klia, 7. rare. Metabletus carchamationis, Mén., Gbir, 5, 6, rare. Blechrus glabratus, Duft.\*, everywhere throughout the year; plagiatus, Duft.\*, Marsa, Melleha, El Klia, 7, 8, 11, not uncommon. Dromius linearis, Ol., Fort Manoel, St. George's Bay, 10; quadrimaculatus, L., Jniena, rare. Demetrias atricapillus, L.\*, everywhere, 4–11. Cymindis suturalis, Dej., Fort Manoel, 5, one only. Zuphium olens, F., Jniena, 11, one only. Drypta dentatu, Rossi, Ta Baldu, 11, rare; distinctu, Rossi, Jniena, 11, one only.

## Dytiscidæ.

Haliplus lineatocollis, Marsh., Marsa, St. George's Bay, El Klia, Gozo, 3, 4, 9, common. Calambus confluens, F., El Klia, 10, common. Deronectes ecresyi, Aubé, Salina, 7, common. Hydroporus varius, Aubé, St. Paul's Bay, El Klia, Fidian, Gozo, 6, 8, 11, common; tessellatus, Drap., v. humilis, Klug, general, 1–5, 10. Laccophilus interruptus, Pz., v. testaccus, Aubé, El Klia, 10. Agabus nebulosus, Först., El Klia, Melleha, 4. Cymatopterus fuseus, L., El Klia, 6. Meladema coriaccum, Lap., El Klia, St. Paul's Bay, 5, 8, 10, common. Dytiscus circumflexus, F., a single specimen was found alive in the Grand Harbour in 1890.

#### HYDROPHILIDÆ.

Helochares dilutus, Er., El Klia, common, 6-10. Anacana orata, Reiche, Jniena, Melleha, Gozo, 5, 6. Laccobius bipunctatus, F., El Klia, Gozo, 7, 10. Berosus affinis, Brull., El Klia, Mistra, St. George's Bay, common, 6, 9, 10. Cercyon depressus, Steph., Marsa Scala, 7, 8, common; ustulatus, Preyss., Coll. J. J. W.; flavipes, F., Coll. J. J. W.; quisquilius, L.\*, everywhere, 3, 4, 6, 7; centrimaculatus, Sturm, Coll. J. J. W. Spharidium bipustulatum, F.\*, general, 1, 3, 7. Colostoma orbiculare, F., Gozo, Migiarro, 6, 7, common. Dactylosternum insulare, Lap., Ghirghenti, 10, rare. Helophorus rugosus, Ol.\*, El Klia, 3, not common; porculus, Bedel, Gbir, 4, 5, 6, rare; alternans, Gené\*, El Klia, 3; aquaticus, L.\*, general, 3–11; dorsalis, Marsh.\*, v. cmaciatus, Kuw., St. Paul's Bay, 10, 11, rare; algiricus, Bach., St. Paul's Bay, 11; pallidipennis, Motsch., v. reitteri, Kuw., Wied Ghormor, Gbir, L'Imtahlep, 3-5. Ochthebius quadricollis, Muls., L'Imtahlep, 5, common; subinteger, Muls., L'Imtahlep, 5, rare; forcolatus, Germ., Marsa Scala, 8, common; exaratus, Muls., Jniena, 11, rare; lanuginosus, Reiche, one example; maculatus, Reiche, ex. from J. J. W.; impressicollis, Lap., Ta Baldu, 10, common; v. imperfectus, Kuw., Boschetto, 7, rare. Hydrana nigrita, Germ., Ta Baldu, 11, rare.

## PARNIDÆ.

Parnus algiricus, Luc., L'Imtahlep, Ghirghenti, Fiddian, Gbir, 3, 4, 10, 11, not common.

## HETEROCERIDÆ.

Heterocerus melitensis, Rttr.\*, general, 5, 6, 7.

#### STAPHYLINIDÆ.

Chilopora longitarsis, Er., Salina, 5. Calodera hierosolymitana, Saulc.\*, Jniena, Ta Baldu, 3. Phlæopora corticalis, Grav. var., Coll. J. J. W. Ocyusa nigrata, Fairm., Coll. J. J. W. Oxypoda ambigena, Fauvel, Coll. J. J. W.; umbrata, Gyll., L'Imtahlep, 5, not common; sericca, Heer, Coll. J. J. W.; recondita, Kr., Coll. J. J. W.; hamorrhoa, Sahlb., Melleha, 11, rare. Alcochara clavicornis, Redt.\*, Melleha, 6, not common; (aurovillosa, Jek.); puberula, Klug, Coll. J. J. W.; bipunctata, Ol.\*, Marsa, 5; crassa, Baudi, Jniena, 6, not common; morion, Grav., Coll. J. J. W.; crassiuscula, Sahlb.\*, general, 10; tristis, Grav., Coll. J. J. W.; nigerrima, Kr., Jniena, 6; masta, Grav. var.?, ? locality; nitida, Grav.\*, general. Myrmecia rigida, Er., Ta Baldu, Jniena, Ghirghenti, rare, 5, 6, Alianta plumbca, Wat., Juiena, 6. Halobrectha atricilla, Er.\*, Melleha, 11; alga, Hardy, Melleha, 11. Colpodota sordida, Marsh.\*, Melleha, 11, common; aterrima, Gr., ? locality; nigerrima, Aubé, Jniena, 7; fungi, Grav.\*, v. orbata, Er., general, 2-5, 9-11. Amischa analis, Grav., El Klia, 10, not common. Geostiba plicatella, Fauv.\*, Jniena, 11, not common. Atheta pertyi, Heer\*, general, 10; oraria, Kr., Coll. J. J. W.; xanthopus, Thoms., Coll. J. J. W.; oblita, Er., Melleha, 11, rare; meridionalis, Rey, Jniena, 11, common; atramentaria, Gyll., general; nigricornis, Thoms.\*, teste J.J.W.; zosteræ, Thoms., Ta Baldu, 5, one example; amicula, Steph.\*, Binjemma, Jniena, 10, 11, common; longula, Heer, Jniena, 6, common. Aloconota gregaria, Er.\*, everywhere. Tomoglossa lutcicornis, Er., L'Imtahlep, 6, rare. Dilacra lutcipes, Er., Ta Baldu, 5. Gnypeta labilis, Er., Concessione, 5, El Klia, 6. (Tachyusa cingulata, Jek.) Myrmecopora læsa, Er., Marsa, Marsa Scala, 6; uvida, Er., Marsa Scala, 6; sulcata, Kies., Jniena, 6. Falagria sulcata, Payk.\*, Boschetto, 6; obscura, Grav.\*, everywhere. Actocharis marina, Fauv., Jniena, 9. Pronomæa rostrata, Er., Ghirghenti, 6, rare. Myllæna kraatzi, Sharp, L'Imtahlep, Ta Baldu, 5, Jniena, 10. Oligota pusillima,

Grav.\*, Gbir, Jniena, Binjemma, 10, common. Hypocyptus seminulum, Er., St. Paul's Bay, Boschetto, 6, common. Leucoparyphus silphoides, L.\*, St. Paul's Bay, 6, rare. Tachyporus hypnorum, F.\*, general; v. meridionalis, Fairm., general; nitidulus, F.\*, general. Conurus pubescens, Payk.\*, Fort Manoel, Marsa, 5; pedicularius, Grav.\*, Binjemma, 10, not common. Mycetoporus nanus, Er., Gbir, 10, rare; munctipennis, Scriba, Coll. J. J. W.; reichci, Pand.\*, ex Coll. Walker. Quedius molochinus, Grav.\*, Gbir, Ghirghenti, 6, 9, common; obliteratus, Er.\*, general, 9, 10. Creophilus maxillosus, L., general. Ocypus olcns, Müll., everywhere; ancocephalus, Deg., general, 4, 10, 11; edentulus, Block, Gbir, 10, common. Cafius vantholoma, Grav., Marsa Scala, 6, Melleha, 11; scriccus, Holme, Marsa Scala, 6. Philonthus politus, L., Gbir, 6, rare; sordidus, Grav.\*, Boschetto, 5, common; ventralis, Grav.\*, Melleha, 6, not common; discoideus, Grav.\*, Fiddian, 10; corruseus, Grav., not common; cbeninus, Grav., everywhere; fimetarius, Grav.\*, Coll. J. J. W.; nigritulus, Grav., everywhere; thermarum, Aubé\*, v. maritimus, Motsch., Jniena, Marsa, 10, not common; laticollis, Fauv., Boschetto, 6, Gbir, 10, common; longicornis, Steph.\*, Boschetto, L'Imtahlep, 5, 6, common; varians, Payk.\*, not common; ugilis, Grav., Boschetto, 6, not common. Othius laviusculus, Steph., here and there, not common. Leptucinus parumpunctatus, Gyll., St. Paul's Bay, El Klia, 6, rare; batychrus, Gyll.\*, Marsa, 7, rare. Eulissus fulgidus, F.\*, general, 3-10. Xantholinus punctulatus, Payk., general; hesperus, Er., Zurico, 12, two examples. Lathrobium lusitanicum, Er.\*, Jniena, 10, not common. Achenium striatum, Latr., Jniena, 10, not common; tenellum, Er., Jniena, not common: brevipenne, Qued., teste J. J. W. Medon piccus, Kr., Coll. J. J. W.; nigritulus, Er.\*, general; ochraceus, Grav.\*, general. Scopæus gracilis, Sperk, El Klia, 10, Marsa, 8, rare; debilis, Hoch., El Klia, 10, rare; lavigatus, Gyll.\*, Ghirghenti, 6, rare. Domene stilicina, Er.\*, Jniena, 11, not common. Stilicus orbiculatus, Payk., general. Sunius, n. sp., Ta Baldu, 11, one example; uniformis, Duv., Coll. J. J. W.; bimaculatus, Er., common, 7; melanurus, Kiist.\*, not common, 9; walkeri, Fauv.\*, Binjemma, 10, Fort Manoel, 10, very rare; angustatus, Payk.\*, common, 5, 7, 11. Stenus melunopus, Marsh.\*, Marsa, Melleha, 4, 5, 10, 11, common; nigritulus, Gyll.\*, v. lepidus, Ws., common, 6; languidus, Er.\*, common, 6, 10. Platystethus cornutus, Gyll., Coll. J. J. W.: spinosus, Er.\*, Jniena, 10, not common;

nitens, Sahlb.\*, Jniena, 11, Marsa, 10, common. Oxytelus sculptus, Grav.\*, Boschetto, 5, Marsa, 11; inustus, Grav., common; sculpturatus, Grav., Coll. J. J. W.; nitidulus, Grav., common; complanatus, Er.\*, Jniena, 10; speculifrons, Kr.\*, common. Bledius furcatus, Ol., St. George's Bay, 8, not common; graellsi, Fauv., Coll. J. J. W.; tricornis, Hbst., Marsa, 9, 10, not common; corniger, Rosenh., Salina, 6, common; unicornis, Germ.\*, common; debilis, Er., Melleha, 11, one example. Trogophlaus riparius, Lac., L'Imtahlep, Jniena, 6; bilincatus, Er., Coll. J. J. W.; memnonius, Er.\*, Marsa, 7, common; corticinus, Grav.\*, Gbir, 9, common; troglodytes, Er.\*, Melleha, 11, rare; punctipennis, Kies., L'Imtahlep. Marsa, 6, 7, common; alutaccus, Fauv., Marsa, 7, common; pusillus, Grav., El Klia, 5; n. sp., El Klia, 5, Melleha, 11, two examples. Omalium allardi, Fairm., Coll. J. J. W. Pycnoglypta rufula, Er.\*, Valletta, Zurico, Gozo, 1, 11, 12. Protinus atomarius, Er.\*, here and there. Megarthrus affinis, Mill.\*, Encita, 4, rare.

## MICROPEPLIDÆ.

Micropeplus porcatus, Payk.\*, Encita, 4, rare.

## PSELAPHIDÆ.

Bryaxis cameroni, Rttr., 5-9, common; globulicollis, Rey, Salina, 6, Marsa Scala, 6, common; opuntiw, Schmidt, Jniena, 11, common. Euplectus brunneus, Grim., Coll. J. J. W.

## SCYDMÆNIDÆ.

Cyrtoscydmus, n. sp.\*, Fort Manoel, 10, rare. Scydmænus tarsatus, Müll.\*, Gbir, 5, rare; antidotus, Germ.\*, Marsa Scala, 11, rare; ? sp. n., Marsa, one example.

# SILPHIDÆ.

Catops morio, F\*, Marsa, rare; Ptomophagus scricatus, Chaud., Fort Manoel, 5, one example. Silpha olivicri, Bedel\*, general, 1-6, 11, 12.

## Anistomidæ.

Hydnobius demarchii, Rttr., one example. Agathidium lævigatum, Er., Coll. J. J. W.

#### CLAMBIDÆ.

Calyptomerus dubius, Marsh., Binjemma, 10. Cybocephalus politus, Germ., Boschetto, 5, Gozo, 6, common.

#### CORYLOPHIDÆ.

Parmulus nanus, Rey, general; densatus, Rttr., general. Sericoderus luteralis, Gyll., L'Imtahlep, 5.

### TRICHOPTERYGIDÆ.

Ptenidium pusillum, Gyll., Ghirghenti, St. Paul's Bay, 6, common. Actidium aterrimum, Motsch., Birzebuggia, 7. Actinopteryx fucicola, Allib., Marsa Scala, M. Scirocco, 8, common. Trichopteryx brevipennis, Er., L'Imtahlep, 5; sericans, Heer, Melleha, 7, common.

#### Phalacridæ.

Phalacrus fimetarius, F., general, 3–11; v. minor, Guill., Coll. J. J. W.; substriatus, Gyll., Marsa Scala, 7, rare. Olibrus bimaculatus, Küst., general, 5, 9, 10; liquidus, Er., Marsa Scala, 8, common; affinis, Sturm\*, common; pygmarus, Sturm\*, not common. Stilbus testaceus, Panz.,\* very common.

## Endomychidæ.

Myrmeeoxenus picinus, Aub., St. Paul's Bay, 6, common. Symbiotes gibberosus, Luc.\*, Gbir, 10.

#### CRYPTOPHAGIDÆ.

Cryptophilus integer, Heer\*, Boschetto, 6. Leucohimatium clongatum, Er., Coll. J. J. W. Cryptophagus thomsoni, Rttr., Jniena; scanicus, L., Ta Baldu, 6; vini, Panz., Ghirghenti, 6. Atomaria unifasciata, Er., Valletta; scutcllaris, Motsch, Melleha, 11. Ephistemus globulus, Payk., Jniena, 9.

#### LATHRIDHDÆ.

Merophysia formicaria, Luc., Fort Mauoel, 5, rare. Holoparamecus bertouti, Aub., Marsa Scala, 6, common; niger, Aub.\*, Melleha, 11, common; canlarum, Aub., Coll. J. J. W.; singularis, Beck, on board in Grand Harbour. Enicmus minutus, Er., Coll. J. J. W.; transversus, Ol.\*, common throughout the year. Cartodere elegans, Aubé, Gbir, 5, one example. Melanophthalma sericca, Mann.,

Fort Manoel, 10; distinguenda, Com.\*, common throughout the year; fulvipes, Com.\*, common throughout the year.

#### TRITOMIDÆ.

Litargus coloratus, Rosh.\*, common throughout the year. Typhwa fumata, L., Fort Manoel, 5.

#### NITIDULIDÆ.

Cercus rufilabris, Latr., Ta Baldu, 5, common. Brachypterus glaber, Newm.\*, common, 5; ?n. sp., one example. Carpophilus immaculatus, Luc.\*, Boschetto, 6; mutilatus, Er., common throughout the year; hemipterus, L., common throughout the year. Nitidula flavomaculata, Rossi, Marsa, 10, one specimen. Pria dulcamara, Scop., Gozo, 7, not common. Meligethes picipes, Sturm\*, Boschetto; lugubris, Sturm, Jniena, 6. Rhizophagus bipustulatus, F.\*, Zurico, 2.

# TROGOSITIDÆ.

Tenebrioides mauritanieus, L., common near granaies throughout the year.

#### COLYDIDE.

Ditoma erenata, F., Coll. J. J. W. Aglenus brunneus, Gyll., Jniena, 10.

#### CUCUJIDÆ.

Lamophlaus ferrugineus, Steph.\*, very common throughout the year; hypobori, Perr., L'Imtahlep, St. Paul's Bay, 3, 4, 5, common. Hypocoprus quadricollis, Rttr., St. Paul's Bay, 6, common. Xenoscelis costipennis, Fairm.\*, Jniena, 10, not common. Silvanus surinamensis, L., common throughout the year. Cathartus advena, Waltl, Coll. J. J. W. Monotoma spinicollis, Aub.\*, St. Paul's Bay, 6, not common; picipes, Herbst\*, one example.

## Dermestidæ.

Dermestes frischi, Kug.\*, very common, 4–10; undulatus, Brahm, Gozo, Encita, 3, 4, rare. Attagenus piceus, Ol.\*, v. dalmatinus, Küst., Valletta, 5, not common; marginicollis, Küst., not common; bifasciatus, Rossi\*, common, 3–6. Anthrenus fasciatus, Hbst., common, 3–6; biscrensis, Rttr., very common, 6, 7, 8; verbasci, L.\*, Boschetto, 6, not common; fuscus, Latr., Boschetto, 6, rare.

CISTELIDÆ (= BYRRHIDÆ, olim). Syncalypta, ? n. sp., Coll. J. J. W.

#### THORICTIDÆ.

Thorictus grandicollis, Germ.\*, general.

## HISTERIDÆ.

Hister major, L.\*, here and there; rentralis, Marsh., Marsa, 5; bimaculatus, L., v. morio, Schmidt, here and there. Carcinops minima, Aub.\*, Marsa, 6; 14-striata, Steph., St. Paul's Bay, 6. Saprinus semipunctatus, F., Melleha, Marsa Scala, 6; chalcites, Ill., Marsa Scala, 8; nitidulus, Payk.\*, Marsa Scala, 8; pulcherrimus, Web.\*, Salina, 3; algericus, Payk., rare; spretulus, Er., rare; cribellaticollis, Duv., Marsa, 7; rubripes, Er., Melleha, 11; apricarius, Er., rare; dimidiatus, Ill., rare. Onthophilus exaratus, Ill., Valletta, 11. Acritus seminulum, Küst.\*, St. Paul's Bay, 6.

## SCARAB.EIDÆ.

Scarabaus semipunetatus, F., Melleha, 10-12, 1-3; variolosus, F., general. Copris hispanus, L., not uncommon. Bubas bison, L., Marsa, Ghirghenti, Melleha, early months of year; bubalus, Ol., Coll. J. J. W. Chironitis hungaricus, Hbst., Corradino, Wied el Klaja, 6, 8. Onthophagus taurus, Schreb., not uncommon, Jniena, 10; andalusiaeus, Waltl, not uncommon, Jniena, 10. Oniticellus fulvus, Goeze, not uncommon, Jniena, 7. Aphodius fimetarius, L., Attard, 10, Jniena, 6; granarius, L.\*, common; hydrocheris, F.\*, Marsa; nitidulus, F.\*, Jniena, Zibbih; longispina, Kiist., Marsa, 9, Jniena, 6; tersus, Er., Marsa, 4; lincolatus, Ill.\*, Marsa, Corradino, 2: consputus, Creutz., Coll. J. J. W.; unicolor, Ol., Marsa, 5; lividus, Ol., Notabile, 8; quadriguttatus, Hbst., Coll. J. J. W. Pleurophorus casus\*, Panz., general. Rhyssemus arcnarius, Costa, Coll. J. J. W. Psammodius sulcicallis, Ill., Fort Manoel, 10; porcicollis, Ill., Melleha, 10. Diastictus vulneratus, Sturm, Coll. J. J. W. Trox hispidus, Pont.\*, v. asiaticus, Fald., here and there. Geotrupes douci, Gory \*, general; lavigatus, F.\*, general. Pentodon punctatus, Villers \*, general. Phyllognathus silenus, F., Attard, 9. Oryctes grypus, Ill., Attard, Marsa Scirocco, 10. Epicometis squalida, Scop.\*, general. Leucocclis funcsta, Poda\*, general. Potosia metallica, F., v. cuprea, Gory, flowers of Cynara horrida, common, 6; angustata, Germ.\*, flowers of Cynara horrida, rare. Æthicssa floralis, F., flowers, 6.

#### Buprestidæ.

Capnodis tenebrionis, L.\*, Ghirghenti, 6, rare. Anthaxia umbellatarum, F., Gozo, 6. Acmæodera discoidea, F., Coll. J. J. W. Agrilus obscuricollis, Kies., Musta, Boschetto, 6.

#### ELATERIDÆ.

Drasterius bimaculatus, Rossi, Marsa, 10, 11, common. Cardiophorus argiolus, Gené\*, Ta Baldu, 6, common; maculierus, Desbr.\*, v. beloni, Desbr., Gozo. Athous castaneus, Fairm., Attard, Gbir, Salina, 9, 11. Isidus moreli, Rey, Melleha, 6, rare.

## CEBRIONIDÆ.

Cebrio gigas, F., Ghirghenti, Attard, Melleha.

#### CANTHARIDÆ.

Lampyris lareynici, Duv., general, 6. Multhinus scapularis, Mars., not uncommon, St. Paul's Bay, 4. Multhodes malcolmi, Pic, Boschetto, 5; sp., Ta Baldu, 6; ragusæ, Fiori\*; cameroni, Pic, Gbir, 5, rare. Drilus flavescens, Rossi\*, Gozo. Charopus apicalis, Kiesw., Salina, 5. Colotes maculatus, Lap., general; punctatus, Er., St. Paul's Bay, 6. Hypebæus flavicollis, Er.\*, Ta Baldu, Boschetto, 5. (Ebæus cyancus, Lap.) Attalus melitensis, Peyr., general, 5; var. with all femora testaceous, Marsa, Ghirghenti, 5, 6; erythroderus, Er., Ta Baldu, 5. (Malachius dissimilis, Baudi.) Henicopus scutellaris, F., Salina, 6; v. rufotestaceus, Salina, 6. Dasytes ærosus, Kiesw., Barracca, 4. Psilothrix cyancus, Oliv.\*, Gbir, 4, 5; melanostoma, Brull.\*, Gbir, 4, 5. Haplocnemus melitensis, Schilsky, Ta Baldu, 6. Dasytiscus melitensis, Bourg.\*, El Klia, Fiddian, 3, 6. Danacwa pallipes, Panz., Boschetto, 6.

## CLERIDÆ.

Tillus transversalis, Charp., L'Imtahlep, 5. Necrobia ruficollis, F.\*, here and there, 6, 10; rufipes, Degeer \*, general, 10.

BRUCHIDÆ (= PTINIDÆ, olim).

Gibbium boieldicui, Levr., Valletta, 4, 5. Niptus

1 This is the var. testaceipes, Pic, Ech. 1903, 169.

(Microptinus) reitteri, Pic, L'Imtahlep, 5. Bruchus (Ptinus) spitzyi, Villa, Jniena, 11; affinis, Desbr., Valletta, 3; variegatus, Rossi \*, Valletta; duvali, Lareyn., Coll. Gatto; brevipilis, Desbr., Boschetto, 6, Attard, 9; reichei, Boield., Jniena, 10.

# BYRRHIDÆ (= ANOBIIDÆ, olim).

Byrrhus nitidus, Hbst., Boschetto, 6; hirtus, Ill., Coll. Gatto; paniceus, L.\*, Valletta. Oligomerus reyi, Bris.\*, Valletta. Metholeus cylindricus, Germ., St. Paul's Bay, 6. Lusioderma hæmorrhoidale, Ill.\*, Ta Baldu, 6; bicolor, Schauf., L'Imtahlep, 6; bubalus, Fairm., general; sp., Boschetto, 6; testuceum, Duft, Binjemma, 10.

## LYCTIDÆ.

Lyctus brunnens, Steph., Valletta.

## Bostrychidæ.

Xylopertha pustulata, F., Coll. Gatto.

## TENEBRIONIDÆ.

Erodius neapolitanus, Sol., Melleha, 10-12, 1-3. Tentyria sardoa, Sol., Fort Manoel, Ricasoli; lavigata, Stev.\*, v. leachi, Baudi, everywhere. Stenosis melitana, Rttr.\*, pretty general. Dichillus pertusus, Kies.\*, Porto Reale, 3, very rare. Helenophorus colluris, L.\*, here and there. Akis melitana, Rttr., common. Scaurus striatus, F.\*, common. Blaps gigas, L., not uncommon; mucronata, Latr.\*, not uncommon; (forcicollis, All.). Asida melitana, Rttr.\*, Valletta, Notabile, 10, 12. Pimelia sardoa, Sol., v. subscabra, Sol.\*, general. Ocnera angustata, Sol.\*, 5-9, here and there. Crypticus cameroni, Rttr., Melleha, 10-12, 1-2. Dendarus carinatus, Muls., Ta Baldu, 10. Phylax littoralis, Muls., v. melitensis, Baudi \*, common. Scleron abbreviatum, Reiche, Coll. J. J. W. Opatrum melitense, Kiist., Melleha, 11. Gonocephalum schulosum, Fald.\*, Marsa Scala; rusticum, Ol., Marsa, 8. Penthicus punctulatus, Brull., Ricasoli, 10. Ammobius rufus, Luc., Melleha, 7, 11. Trachyscelis aphodioides, Lat., Melleha, 11. Phalcria acuminata, Küst., Jniena, 6. Pentaphyllus testaccus, Hellw., Coll. J. J. W. Tribolium ferrugineum, F., Valletta, 10. Corticeus castaneus, F., Coll. J. J. W.; bicolor, Ol., Coll. J. J. W. Phthora crenata, Germ.\*, Marsa, S. Echocerus cornutus, F., general.

Alphitobius diaperinus, Panz.\*, Coll. Gatto. Clitobius oratus, Er.\*, Fort Manoel, 10. Cossyphus insularis, Lap., Jniena, 11. Tenebrio molitor, L., Imtarfa, 7, 8. Calcar elongatum, Hbst., Jniena, 11. Helops pygmæus, Küst., Gbir, Jniena, 10, 11. Gonodera nitidula, Kiesw., Ta Baldu, 6. Omophlus melitensis, Baudi (championi, Rttr.), pretty general, 4.

#### MORDELLIDÆ.

Mordellistena micans, Germ., 4, 5, 6, general. Anaspis varians, Muls., Jniena, 6.

## Вигрирновиде.

Emenadia flabellata, F., S. Giorgio, 8, 9.

## MELOIDÆ.

Meloë violaceus, Marsh.\*, here and there, 4, 5; purpurascens, Germ.\*, Musta, Marsa; tuccius, Rossi\*, here and there, 1, 2, 3, 5; rugosus, Marsh.\*, here and there, 2, 3. Hapalus bimaculatus, L., v. caruanw, Rttr.\*, Marsa, Marsa Scirocco, Attard, 1, 2.

#### ANTHICIDÆ.

Euglenes populneus, Panz., Ta Baldu, 10. Anthicus rodriguesi, Latr.\*, Melleha, 11; humilis, Germ.\*, Marsa, 8; v. lameyi, Marsh., Marsa, 8; minutus, Laf.\*, Marsa, 8; formicarius, Goeze \*, Fort Manoel, 10; instabilis, Schm.\*, general; opaculus, Woll., Ghirghenti, 8, Fort Manoel, 10; velox, Laf., general, 5; 4-guttatus, Rossi \*, Marsa, St. Paul's Bay, 8; hispidus, Rossi \*, Marsa, Gbir, 10; fenestratus, Schm., Melleha, 7. Anlacoderus melitensis, Pic, flowers, 5, 6. Ochthenomus tenuicollis, Rossi \*, Jniena, Melleha, 10.

#### ŒDEMERIDÆ.

Nacerdes melanura, L., here and there. Œdemera simplex, L., general, 6; unicolor, Schm., district uncertain, 6; barbara, F., L'Imtahlep, 5. Stenostoma melitense, Cam., Jniena, 6.

#### CURCULIONIDÆ.

Otiorrhynchus affaber, Boh., Jniena, rare; lugens, Germ.\*, general; eribricollis, Gyll., general. Sciaphilus siculus, Boh., ex. Coll. J. J. W. Barypithes mollicomus, Ahr. Strophomorphus porcellus, Sch., Jniena, Binjemma, 10, 11, rare.

<sup>1</sup> Ent. Mo. Mag. 1907, p. 226. TRANS. ENT. SOC. LOND. 1907.—PART III. (NOV.) 27

Sitona cachecta, Gyll., v. setulifer, Fahrs., Melleha; intermedius, Küst., Ta Baldu, 6; cambricus, Steph., Gbir, 5; occillatus, Kust., Melleha, 5; crinitus, Hbst., locality unknown; seriesetosus, Fahrs., pretty general, 4, 5; tibialis, Hbst., Melleha, 5; flavescens, Marsh., v. cinnumomeus, All., Jniena, 6; humerulis, Steph., v. discoidens, Gyll., common; virgatus, Fahrs., Jniena, 5; lineatus, L.\*, common. Trachyphlaus laticollis\*, Boh., St. Paul's Bay, 8; n. sp., Floriana. Thylacites belloni, Desbr., Marsa, 8. Brachyeerus algirus, F.\*, general; albidentalus, Gyll., here and there; undatus, F.\*, general. Cleonus murulicollis, Chev.\*, Melleha, 5, not common; mendicus, Gyll., Fort Manoel, 10; excoriatus, Gyll., general; cincreus, Sch., Zibbih, 10; madidus, Ol.\*, Birzebuggia, 7. Lieus anguinus, L.\*, Coll. Gatto; algirus, L.\*, general, 7; junci, Boh., Marsa, 8. Larinus vittatus, F., Boschetto, 5; cynara, F., v. glabrirostris, Sch., general on Cynaru horrida; flavescens, Germ., general. Rhinocyllus conicus, Fröl., L'Imtahlep, 5. Gronops lunatus, F.\*, Marsa, 10. Rhytidoderes plicatus, Oliv.\*, general. Hypera philanthus, Oliv.\*, pretty general, 7, 8; crinita, Boh., pretty general, 7, 8; pastinaca, Rossi, Melleha, 10; marina, F., TaBaldu, 10; variabilis, Hbst.\*, pretty general, 7,8; nigrirostris, F.\*, Jniena, 6; jucunda, Cap., Coll. Gatto. Limobius borealis, Payk., Ta Baldu, 5. Pachytychius squamosus, Gyll., Salina, 5. Smicronyx cyaneus, Gyll., Gbir, 10; jungermannia, Reich.\*, general. Orthochates setiger, Beck, Coll. J. V. Charorrhinus squalidus, Fairm., Coll. J. J. W. Mesites pallidipennis, Boh., Valletta, 6; curvipes, Boh., Ghirghenti, 8. Codiosoma, spadix, Hbst.\*, Boschetto, G. Aralles ptinoides, Marsh, Coll. J. J. W.; diocletianus, Germ., Iniena, 10. Caliodes cardui, Hbst, rifle range, 5. Ceuthorrhynchidius troglodytes, F.\*, rifle range, 5. Centhorrhynchus peregrinus, Gyll., L'Imtahlep, 5; rugulosus, Hbst.\*, rifle range, 5; melanostictus, Marsh., rifle range, 5; quadridens, Panz.\*, rifle range, 5; melitensis, Schultze\*, rifle range, 5. Baristimida, Rossi, Coll. J. J. W.; spoliuta, Boh.\*, Marsa, 5, Melleha, 11; cærulescens, Scop., Coll. J. J. W.; picturata, Mén., Marsa, 7, one example. Sphenophorus piccus, Pall., here and there; abbreviatus, F., Ghirghenti, 3, El Klia, 6. Calandra granaria, L., general; oryzw, L.\*, general. Anthonomus ornatus, Reiche, Zibbih, 6. Tychius grenieri, Bris., Coll. J. J. Walker; meliloti, Steph.\*, general; tomentosus, Hbst., Ta Baldu, 6. Sibinia primita, Hbst.\*, Boschetto, 6; arenaria, Steph.\*, Marsa, 6; attalica,

Gyll., ex J. J. Walker's Coll. Rhamphus pulicarius, Hbst., Ta Baldu, 5. Merinus pyraster, Hbst.\*, Floriana, rifle range, 5; circulatus, Marsh., an example in Mr. E. A. Newbery's Collection obtained by P. de la Garde. Gymnetron simum, Rey \*, Coll. Gatto. Nanophyes hemisphæricus, Ol.\*, El Klia, 7; nitidulus, Gyll., Boschetto, 6. Apion carduorum, Kirb., v. galactitis, Wenck.\*, common everywhere; v. meridianum, Wenck., common everywhere; penetrans, Wenck., Boschetto, 7; detritum, Rey, Gozo, 6; robusticorne, Desbr., Coll. J. J. W.; brisouti, Bed., Jniena, 6; semivittatum, Gyll.\*, everywhere; rufescens, Gyll., everywhere; æneum, F., Coll. Gatto; radiolus, Marsh., Gozo, 7, Ta Baldu, 5; pubescens, Kirb., Ghirghenti, 8; rufirostre, F.\*, L'Imtahlep, 5, Marsa, 6; dentipes, Gerst., Jniena, 5; apricans, Hbst.\*, everywhere; pisi, F., Boschetto, 5; vorax, Hbst., Boschetto, 5; frumentarium, L., near Valletta, one example; malvæ, F.\*, Gbir, L'Imtahlep, 5: violaceum, Kirby\*, Jniena, 6. Rhynchites præustus, Boh., Ta Baldu, 6.

## ANTHRIBIDÆ.

Urodon canus, Kiist.\*, L'Imtahlep, 5; Cercomorphus duvali, Perris, Ghirghenti, 5, one example.

# Mylabridæ (= Bruchidæ, olim).

Mylabris (Bruchus) pisorum, L.\*, general; pallidicornis, Boh., Coll. J. J. W.; ulicis, Rey, L'Imtahlep, 5; tristis, Boh., L'Imtahlep; sertata, Ill., Jniena, 6; rufipes, Hbst., general; rufimana, Boh.\*, general; v. velutina, Rey, Coll. J. J. W.; laticollis, Boh., L'Imtahlep, 5; chinensis, L., Coll. Gatto; 5-guttata, Ol., Ghirghenti, Salina, 6; v. meleagrina, Gené, Ghirghenti, Salina; seminarta, L., v. picipes, Germ.\*, Boschetto, L'Imtahlep, 5, 6; albolineata, Blanch., Coll. Gatto; biguttata, Ol., Jniena, Concessione, 6; v. fulvipennis, Germ., Jniena, Concessione, St. Paul's Bay, 6; v. mendicuns, Ws., Jniena, Concessione, 6; murina, Boh., Ghirghenti, 8; bimaculata, Ol.\*, Marsa Scala, 8; imbricornis, Panz., everywhere; anxia, Fahrs.,? district, 5; pygmæa, Boh., Coll. J. J. W.; ovalis, Blanch., L'Imtahlep, 5. Spermophagus cardui, Boh., Ghirghenti, Marsa, 8.

#### SCOLYTIDÆ.

Hylesinus fraxini, Panz.\*, Ghirghenti. Scolytus scolytus, F., Coll. J. J. W. Phleotribus scarabwoides, Bern., Marsa Scirocco, 8, 9. Hypoborus ficus, Er.\*, Marsa Scirocco, 9.

## CERAMBYCIDÆ.

Ccrambyx ccrdo, L., dockyard; miles, Bon.\*, Marsa Scirocco, Jniena, 6. Hesperophanes cincreus, Villers, Notabile, Marsa Scirocco, 9. Callidium violaceum, L., very rare. Hylotrupes bajulus, L., dockyard, 5. Rhopalopus clavipes, F., very rare. Liagrica timida, Mén., here and there. Clytanthus varius, F., Boschetto, 6. Parmena solieri, Muls., Marsa Scala, 11. Niphona picticornis, Muls., Marsa Scala, 8. Calamobius filum, Rossi, Ta Baldu, Ghirghenti, L'Imtahlep, 5. Ayapanthia asphodeli, Lat.\*, common, 1, 2; cynarw, Germ., Fort Manoel, Corradino, 2, 3; cardui, L., L'Imtahlep, 6. Saperda punctata, L., Valletta. (Oberca crythrocephala, Schr., v. melitana, Reiche).

## CHRYSOMELIDÆ.

Lema melampa, L.\*, pretty general. Crioccris paracenthesis, L., Marsa Scirocco, 6. Labidostomis taxicornis, F.\*, pretty general. Cryptocephalus signaticollis, Suff.\*, Jniena, 6; ochroleuens, Fairm., Marsa Scala, 8. Puchnephorus impressus, Rosh., Juiena, 10; cylindricus, Luc., Juiena, 11. (Timarcha melitensis, Ws.) Chrysomela banksi, F., here and there, 10, 11; variolosa, Pet.\*, here and there, 10; crythromera, Luc.\*, Melleha, 11, rare; quadrigemina, Suff., Gbir, 11; didymata, Scrib., Zibbih, 10; bicolor, F., Coll. Gatto; americana, L.\*, here and there, 3, 6; grossa, F.\*, Notabile, 9. Prasocuris distincta, Luc., v. marginicollis, Suff., Jniena, 11. Aulacophora abdominalis, F.\*, general. Podagrica semirufa, Küst.\*, general. Crepidodera impressa, F., Jniena, 6. Ochrosis ventralis, Ill., general. Chatocnema tibialis, Ill., Melleha, 10, 11; aridula, Gyll.\*, Gbir, 10. Psylliodes inflata, Reiche\*, Fort Manoel, 10; chrysocephala, L., L'Imtahlep, Boschetto, 5; v. nucca, Ill., Coll. J. J. W.; napi, F., Jniena, 6: pallidipennis, Rosh.\*, Binjemma, 10. Phyllotreta rugifrons, Küst., Ta Baldu, 6: lativittata, Kütsch.\*, Ghirghenti, 9: cruciferæ, Goeze, Ta Baldu; consobrina, Curt., Gozo, L'Imtahlep, 5; procera, Redt.\*, general. Aphthona flaviceps, All.\*, Marsa Scala, 8; nigriceps, Redt.\*, Ta Baldu, 10; pyymæu, Kütsch.\*, general: cuphorbiæ, Schr., Ghirghenti, 8. Longitarsus echii, Koch\*, 5; aneus, Kiitsch.; corynthius, Reiche\*, 5; brunneus, Duft., St. Paul's Bay, 4: luridus, Scop., St. Paul's Bay, 11; stragulatus, Foudr.\*, Coll. Gatto; lateripunetatus, Rosh., Ta Baldu, 10; exoletus, L., L'Imtahlep; lycopi, Foudr.\*, Jniena, 6; pratensis, Panz.,

Gbir, 10; v. minima, Kütsch., Gbir; tabidus, F., Birchicara, 7; xruginosus, Foudr., L'Imtahlep, 6; ochroleucus, Marsh., L'Imtahlep, 5; pellueidus, Foudr., Birchicara, 7; membranaccus, Foudr., general, 5; cerinus, Foudr., Gbir, 5. Dibolia occultans, Koch, L'Imtahlep, 6. Sphwroderma testaceum, F., Boschetto, 10; ocularia, All., Ghirghenti, 8. Cassida vittata, Vill., on Atriplex, 5, 6; hemisphwrica, Hbst., Ghirghenti, 8.

## COCCINELLIDÆ.

Epilachna chrysomelina, F., common. Coccinella 7-punctata, L.\*, common; 11-punctata, L., Barracca, 5; 10-punctata, L., Boschetto, Ta Baldu, 10. Chilocorus bipustulatus, L., pines, Boschetto, 6. Exochomus 4-pustulatus, L., Floriana, 10. Rhizobius litura, F., general; v. discomacula, Costa\*, Jniena, 10. Scymnus subvillosus, Goeze, v. pubescens, Panz., and pallidivestis, Muls., general; arcuatus, Rossi, v. hausmanni, Gredl., Gozo, 6, rare; punctillum, Ws., Gbir, 9; interruptus, Goeze, everywhere, 7; v. basalis, Redt., Salina, Gozo, 6; kieschwetteri, Muls., here and there, rare; pulchellus, Hbst., St. Paul's Bay, 8; bipunctatus, Kugel., Binjemma, 10.